Occurrence Details

Occurrence Number: 115I 011
Occurrence Name: Stu - Zone A
Occurrence Type: Hard-rock
Status: Prospect
Date printed: 12/16/2025 7:36:02 AM

General Information

Secondary Commodities: copper, gold, silver
Aliases: Bay, Stu, Carmacks North
Deposit Type(s): Porphyry Cu-Mo-Au
Location(s): 62°24'59.07" N - -136°51'4.64" W
NTS Mapsheet(s): 115I07
Location Comments: Location = collar of drill hole 80-14, highest grade intercept.
Hand Samples Available: No
Last Reviewed: Mar 30, 2016

Capsule

Work History

Staked as Bay cl 1-21 (Y60061), cl 23 (Y60083), 25 (Y60085) and cl 39-204 (Y60099) in Jan/71 by Hudson's Bay Oil & Gas Company Ltd, which performed grid soil sampling, ground magnetic and EM surveys in 1971 and an IP survey in 1974.

United Keno Hill Mines Ltd prospected the property in 1976, restaked it as Stu cl 1-120 (YA8616) in Feb/77, and explored with geological mapping, deep soil sampling (0.9 m average), ground magnetic and EM 16 surveys in 1977. The company added Stu cl 122-123 (YA19722) in Sep/77, carried out an IP survey in 1978 and bulldozer trenched in 1979.

In May/80 the company staked Stu cl 123-192 (YA48976) around the remaining Stu claims and staked Noon cl 1-108 (YA48868) to the south. Later in the year United Keno Hill Mines drilled 28 diamond drill holes (1 504 m) on the Stu claims and carried out geological mapping and soil sampling programs on the Noon claims.

In 1981 United Keno Hill Mines flew a regional airborne electromagnetic and magnetics survey over their claim holdings. The company followed up with geological mapping and soil sampling programs on the Stu and Noon claim blocks. In 1982 the company trenched the most promising geochemical targets. In 1989 the company drilled 30 percussion drill holes (1 823 m) over previously dug trenches located in the southwest corner of the Stu claim block.

Restaked as Stu cl 1-24 (YC19496) in Jun/2002 by B Kreft, who used a Yukon Mining Incentive Program (YMIP) grant to prospect and sample the three known zones. No further assessment work appears to have been carried out and the claims lapsed in Jun/2004.

In Dec/2004 B. Harris restaked occurrence/zone A within Stu cl 1-10 (YC37770) and occurrence/zone B within cl 21-28 (YC37788). In 2005 Harris carried out a reconnaissance prospecting program aimed at locating old drill holes and trenches and re-sampled old drill core.

In Aug/2005 Harris staked Stu cl 55-72 (YC40201) to the north and west. In Sep/2005 Harris restaked occurrence/zone C (located to the southeast) within Stu cl 11-20 (YC40249). Harris also staked cl 29-30 (YC40201) over open ground to the north and cl 39-54 (YC40262) to the west, north and northeast at the same time.

In 2006 Harris carried out magnetic susceptibility testing on old drill core, GPS surveyed as many of the previous trenches and drill holes that could be re-located and sampled some of the historic trenches.

In Apr/2006 S. Ryan staked Bread cl 1-24 (YC46806) 2 km south of occurrence/zone A. Ryan collected a string of 30 soil samples in Aug/2006 and in Nov/2006 optioned a 100% interest in the Bread claims and 14 other neighboring claim groups to BCGold Corp in return for cash, shares and certain work commitments. In Apr/2007 BC Gold staked Bread cl 25-36 (YC60054) on the south side of the existing Bread claim block. The company flew a regional airborne magnetic and radiometric survey over their claim holdings later in the year

In Jul/2007, Harris added Stu cl 73-132 (YC65256) to his existing claim block. In 2008, Harris geologically mapped around the three mineralized zones (occurrences), collected rock and soil samples and performed a petrographic study of mineralized samples collected from the three known mineralized zones.

In 2010, Harris prospected, geologically mapped and rock sampled four historic trenches located in the northwest corner of the claim block. Harris also prospected and collected reconnaissance soil samples in; 1) the area located between zones A and C, 2) the area located north of zone C and 3) the area located west of zone B.

In 2012, Harris carried out a brief property evaluation and collected 5 rocks samples from mineralized outcrops in order to perform magnetic susceptibility and petrographic studies.

In Sep/2013, Harris cleared overgrown roads and trails, collected rock and soil samples from various areas within zone B and carried out further magnetic susceptibility measurements on the newly collected samples.

The Bread claims expired in Apr/2014. In Jul/2014 Harris restaked the claims as Che cl 1-30 (YF46357). During the same month Harris staked Koo cl 1-58 (YF46387) to the southeast (Minfile Occurrence #115I 126) and WC cl 1-72 (YF20701) and WCF cl 1-11 (YF46407) to the south and Hoo cl 1-28 (YF29773) and 35-46 (YF46387) to the southwest. The WC, WCF and Hoo claim blocks cover the former WC claim block (Minfile Occurrence #115I 128) formerly owned by Copper North Mining Corp.

Between July and Mid-October 2014 Harris carried out 18 man days of work on the Stu claims. The work consisted of cleaning out and resampling numerous trenches located at the three zones. In addition hand trenching and rock sampling was carried out at a new showing located in the east-central portion of zone A and an archaeology survey was under taken.

In Nov/2014 Harris staked Peanut cl 1-12 (YE10064) and cl 17-28 (YE10076) to the southwest (Minfile Occurrence #115I 127) over top expired Peanut claims formerly owned by BCGold Corp. Harris also staked Led cl 1-5 (YE10088) and cl 9-16 (YE10093) to the southeast (Minfile Occurrence #115I 010). By the end of 2014 the newly named Stu property consisted of 376 contiguous mineral claims.

Between 2015 and 2017, Harris carried out a series of small exploration programs on the Stu property. The programs consisted of mechanical and hand trenching, rehabilitation of historic drill core, collection of XRF data, prospecting, rock sampling and reconnaissance scale geological mapping. The work was carried out on the Stu, Koo, WC and WCF claim blocks.

In September 2018, Harris signed an agreement with Granite Creek Copper Ltd, granting Granite Creek 100% interest in the Stu Copper Project.

GEOLOGY

The Stu mineral occurrences are some of several metamorphosed copper deposits which occur along the boundary between the Yukon Tanana and Northern Stikine terranes and include the

Carmacks Copper deposits and occurrences (15 in total) to the south and the Minto Mine deposits to the north. These occurrences occur in a region known as the Carmacks-Minto belt. A study by N. Kovacs, et. al. (2016) on the Carmacks Copper deposit provided new insight into the paragenesis of these occurrences. According to Kovacs, et. al., Carmacks Copper and the associated occurrences are hosted in compositionally heterogeneous, foliated and folded, and variably migmatitic metamorphic rocks, which occur as elongate, NNW-trending inliers in Early Jurassic granitoids of the Granite Mountain batholith (GMB). Hypogene copper mineralization is restricted to metamorphic host rocks, and occurs both as foliation-parallel chalcopyrite-dominant stringers in schistose rocks, and as net-textured bornite-chalcopyrite-dominant sulphides in the migmatitic rocks prevalent along the eastern margin of the metamorphic inlier. The latter style of mineralization is interpreted to form from a sulphide melt phase generated during partial melting of a previously mineralized protolith, during emplacement of the Granite Mountain batholith.

On the Stu Property, Minto Suite granitoid is the dominant rock type. It is cut by aplite, microgranite and pegmatite dykes and contains lenses of foliated to gneissic quartz-feldspar-hornblende-biotite granodiorite which contain most of the mineralization. Locally outcrops of Carmacks volcanics overlie and mafic intrusions intrude the other rock types.

The Hoocheekoo Fault runs down the east side of the property separating the GMB from the Triassic aged Povoas Formation. Smaller east-west cross structures are expressed as creeks such as Camp, Nancy Lee and Hoocheekoo.

The most common phase of the granodiorite is dark grey to grey on weathered surfaces and grey white to grey on fresh surfaces. It is medium grained with lesser fine grained or coarse-grained occurrences and is typically porphyritic with 5-15% potassium feldspar phenocrysts. When foliated it has a slightly higher mafic content and foliation is weak to strong. The gneissic phase is fine to medium grained with a moderate to strong foliation or banding. An extreme variation in mafic content has been observed.

There are 3 advanced and 7 early-stage mineral occurrences on the Stu Copper Property. In all zones with exposed bedrock, foliation strikes northwest. In Zones A and B the dip is moderately to steeply northeast and in Zone C steeply southwest. Copper mineralization (with occasional Au or Ag) is contained in foliated to gneissic granodiorite, similar to mineralization at Carmacks Copper and the Minto deposits. Chalcopyrite is the most common copper sulphide, bornite is seen in drill core, but rarely on the surface.

Malachite is the dominant supergene copper mineral with lesser tenorite, chalcocite, azurite, chrysocolla and possible brochantite. The supergene minerals display textures indicative of transport and open space filling.

Work History

Date	Work Type	Comment
7/1/2020	Drilling	3 holes, 539.98 m
7/1/2020	Geochemistry	
7/1/2006	Geochemistry	
12/31/2008	Geology	Harris mapped location of occurrences.
12/31/2008	Geochemistry	BCGold carried out MMI soil sampling on Bread claims. Harris also collected samples.
12/31/2008	Lab Work/Physical Studies	By Harris on rock samples.
12/31/2007	Airborne Geophysics	Also radiometric surveys flown by BCGold on Bread and other claims.
12/31/2006	Geochemistry	Sampled old trenches.
12/31/2006	Geochemistry	By Ryan on Bread claims.
12/31/2006	Other	Surveyed location of trenches, drill collars etc.
12/31/2005	Other	Reconnaissance scale, used to re-locate drill holes and trenches.
12/31/1989	Drilling	Thirty holes, 1,823 m collared on B zone.
12/31/1982	Trenching	Trenched geochemical targets
12/31/1981	Geology	On Stu and Noon claims.
12/31/1981	Geochemistry	On Stu and Noon claims.
12/31/1981	Airborne Geophysics	Also magnetic Surveys.
12/31/1980	Drilling	Twenty-eight holes, 1,504 m collared on A & C zones.
12/31/1980	Geology	On Noon claims.
12/31/1980	Geochemistry	On Noon claims.
12/31/1979	Trenching	
12/31/1978	Ground Geophysics	
12/31/1977	Geology	
12/31/1977	Geochemistry	Collected deep samples ~0.9 m.
12/31/1977	Ground Geophysics	Also magnetic survey.
12/31/1976	Other	Company prospected before staking claims.
12/31/1971	Geochemistry	Grid based.
12/31/1971	Ground Geophysics	Also magnetic survey.
12/13/2019	Geochemistry	
12/13/2019	Other	
12/13/2019	Geochemistry	

12/13/2019	Ground Geophysics	
12/13/2019	Other	
12/13/2019	Geology	
12/13/2018	Geochemistry	
12/13/2015	Trenching	Also hand trenching.
12/13/2015	Geochemistry	Also re-sampled drill core.
12/13/2015	Other	
12/13/2015	Development, Surface	
12/13/2014	Geochemistry	
12/13/2014	Geology	
12/13/2014	Geochemistry	
12/13/2014	Trenching	Dug and sampled new trenches.
12/13/2014	Studies	
12/13/2014	Development, Surface	Cleaned out trenches and sampled them.
12/13/2013	Geochemistry	Also collected soil samples.
12/13/2013	Geochemistry	
12/13/2013	Development, Surface	Cleared overgrown roads and trails.
12/13/2012	Lab Work/Physical Studies	Also further magnetic susceptibility studies.
12/13/2012	Other	
12/13/2010	Geochemistry	Sampled historic trenches.
12/13/2010	Geochemistry	Reconnaissance samples.
12/13/2010	Geology	Re-mapped historic trenches.
12/13/2008	Pre-existing Data	
12/13/2008	Geochemistry	
12/13/2006	Lab Work/Physical Studies	Carried out magnetic susceptibility testing on old core.
12/13/2005	Other	
12/13/2005	Geochemistry	
12/13/2005	Geochemistry	Re-sampled old core.
12/13/2002	Other	Kreft prospected and samples zones A, B and C.
12/13/1977	Geochemistry	
12/13/1977	Other	
12/13/1977	Geochemistry	
12/13/1977	Ground Geophysics	
12/13/1974	Ground Geophysics	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
096843	2015	Assessment Report on the Stu Property	Access Road - Development, Surface, Rock - Geochemistry, Prospecting - Other, Hand - Trenching, Mechanical - Trenching		
096781	2014	Geological, Geochemical, Trenching and Archaelogical Report on the Stu Project in the Carmacks Copper-Gold Belt, Yukon	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Heritage/Archeological - Studies, Backhoe - Trenching		
096761	2014	Geological, Geochemical, Trenching and Archaelogical Report on the Stu Project in the Carmacks Copper-Gold Belt, Yukon	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Hand - Trenching		
096582	2013	Assessment Report on the Stu Property	Rock - Geochemistry, Soil - Geochemistry		
095195	2008	Geological, Geochemical, Petrographic and Compilation Assessment Report on the STU Property	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Petrographic - Lab Work/Physical Studies, Data Compilation - Pre-existing Data		
094737	2006	Geological, Geochemical and Geophysical Assessment Report on the STU Property	Drill Core - Geochemistry, Rock - Geochemistry, Property Evaluation - Other, Surveying - Other		

094592	2005	2005 Assessment Report on the STU Property	Drill Core - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Line Cutting - Other, Prospecting - Other		
092854	1989	Report on the 1989 Percussion Drilling of the STU Property	Percussion - Drilling	30	1822.70
090428	1978	Report on the Induced Polarization and Resistivity Survey on the STU and HI Claim Groups	IP - Ground Geophysics, Resistivity - Ground Geophysics		
090248	1977	1977 Geological, Geochemical and Geophysical Report on the STU Claim Group	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, EM - Ground Geophysics, Magnetics - Ground Geophysics, Line Cutting - Other		

Related References

Number	Title	Page(s)	Reference Type	Document Type
YEG2009_11	Bedrock geology of southwest McQuesten (NTS 115P) and part of northern Carmacks (NTS 115I) map area	p. 159-184.	Yukon Geological Survey	Annual Report Paper
2006-1	Tectonic assemblage map of Yukon-Tanana and related terranes in Yukon and northern British Columbia (1:1 000 000 scale)		Yukon Geological Survey	Open File (Geological - Bedrock)
MIR1974	Mineral Industry Report 1974	p.123-124.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Geology	Annual Report
MIR1977	Mineral Industry Report 1977	p.71-72.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Geology	Annual Report
MIR1978	Mineral Industry Report 1978	p. 48.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Geology	Annual Report
YEG2015_13	Copper-gold ± silver mineralization at the Stu occurrence, central Yukon (Yukon MINFILE 115I 011)	p. 207-222.	Yukon Geological Survey	Annual Report Paper
YEG2003_21	Early Jurassic porphyry(?) copper (-gold) deposits at Minto and Williams Creek, Carmacks Copper Belt, western Yukon	p.289-303.	Yukon Geological Survey	Annual Report Paper
YEG1989	Yukon Exploration 1989	p. 117.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report
YEG1981	Yukon Exploration and Geology 1981	p. 217-218.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report
YEG1982	Yukon Exploration and Geology 1982	p. 202-203.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report
YEG2007_OV	Yukon Exploration and Geology Overview 2007	p. 25.	Yukon Geological Survey	Annual Report
YEG2015_OV2	Yukon Hard Rock Mining, Development and Exploration Overview 2015	p. 37, 44.	Yukon Geological Survey	Annual Report Paper
14-091	Report on Geological Mapping, Rock and Soil Geochemical Sampling on the Toshingermann (Tosh) Gold Project		Yukon Government: Energy, Mines and Resources	YMEP Report
15-065	Report on the Stu Property Target Evaluation 15-065		Yukon Government: Energy, Mines and Resources	YMEP Report